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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,914	10/22/2001	Justin R. Morris	ARK007/96868B	4208
7.	590 09/10/2002			
HEAD, JOHNSON & KACHIGIAN Suite 230 112 West Center Street Fayetteville, AR 72701-6036			EXAMINER	
			GELLNER, JEFFREY L	
rayetteville, A	K /2/01-0030	1-0030		PAPER NUMBER
			3643	
			DATE MAILED: 09/10/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

•		Application No.	Applicant(s)			
Office Action Summary		10/014,914	MORRIS ET AL.			
		Examiner	Art Unit			
		Jeffrey L. Gellner	3643			
Period fo	 The MAILING DATE of this communication appr Reply 	pears on the cover sheet with th	e correspondence address			
THE N - Exten after: - If the - If NO - Failur - Any n	ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. Isions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a repl period for reply is specified above, the maximum statutory period re to reply within the set or extended period for reply will, by statute eply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply by within the statutory minimum of thirty (30) will apply and will expire SIX (6) MONTHS fig. cause the application to become ABANDO	e timely filed days will be considered timely. rom the mailing date of this communication. NED (35 U.S.C. § 133).			
1) 🖂	Responsive to communication(s) filed on 08.	August 2002 .				
2a)□	<u> </u>	nis action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositi	on of Claims	ZA parto quajro, roco eler r	,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
4)🖾	Claim(s) 1-26 is/are pending in the application	١.				
	4a) Of the above claim(s) is/are withdra	wn from consideration.	•			
5)[Claim(s) is/are allowed.		THE ROOM			
6)⊠	Claim(s) <u>1-22</u> is/are rejected.	CIT	PETER M. POON PERWISORY PATENT EXAMINER			
7)🖾	Claim(s) 23-26 is/are objected to.	5Ui	TECHNOLOGY CENTER 3600			
8) Claim(s) are subject to restriction and/or election requirement. Application Papers						
9)🛛	The specification is objected to by the Examine	er.				
10) 🔲 -	The drawing(s) filed on is/are: a)☐ acce	pted or b) ☐ objected to by the E	ixaminer.			
	Applicant may not request that any objection to the					
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority u	ınder 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
	1. Certified copies of the priority document	ts have been received.				
	2. Certified copies of the priority document					
* S	3. Copies of the certified copies of the price application from the International Buse the attached detailed Office action for a list	ıreau (PCT Rule 17.2(a)).				
14) 🗌 A	Acknowledgment is made of a claim for domest	ic priority under 35 U.S.C. § 11	19(e) (to a provisional application).			
) The translation of the foreign language procedures Acknowledgment is made of a claim for domes					
Attachmen						
2) Notic	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s) (5) Notice of Inform	mary (PTO-413) Paper No(s) nal Patent Application (PTO-152)			
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DETAILED ACTION

Acknowledgement is made of Applicant's IDS entered 30 January 2002.

Election/Restrictions

Acknowledgement is made of the election of Group I (Claims 1-26) in paper no. 8, entered 14 August 2002. The election is made final. As requested, Claims 27-37 have been cancelled.

Specification

The disclosure is objected to because of the following informality:

The "Cross-Reference to Related Applications" section should be updated to show that 08/950,301 is not US Patent no. 6,374,538 B1.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-3, 5-14, and 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Olmo et al. (US 3,606,741) in view of Pellenc (EP 0053570 A1).

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As to Claim 1, Olmo et al. discloses a shoot and fruit thinner (Figs. 1-8) comprising a draft vehicle (51 of Fig. 1) with an associated mobile power unit (col. 4 lines 35-36); a frame (61 and 62 of Fig. 1) supported by the vehicle, the frame having at least one rotary tool (63 or 64 of Fig. 1) depending therefrom, the tool adapted to selectively thin fruit (col. 2 lines 14-20). Not disclosed is the tool powered by the power unit and controls associated with the power unit for selectively manipulating the tool. Pellenc, however, discloses a shoot/fruit thinner powered by the power unit (Fig. 2) and controls associated with the power unit (inherent in hydraulics (12) controlled by unit (4) in Fig. 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the thinner of Olmo et al. by having the tool powered and controlled by the power unit as disclosed by Pellenc so as to allow for greater control of the tool when the unit is in motion.

As to Claim 2, Olmo et al. as modified by Pellenc further disclose the tool supported by an articulating arm (10 of Figs. 2 and 9 of Pellenc).

As to Claim 3, Olmo et al. as modified by Pellenc further disclose a circular disc with a plurality of radially spaced apart fingers (16 of Fig. 2 of Pellenc).

As to Claim 5, the limitations of Claim 2 are disclosed as described above. Not disclosed is an oval chain with the plurality of spaced apart fingers. Examiner takes official notice that it is old and notoriously well known in the farm machinery art to use a chain to drive tools. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the thinner of Olmo et al. as modified by Pellenc by using a oval chain drive so as to have a drive mechanism which can be fixed quickly.

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As to Claim 6, the limitations of Claim 1 are disclosed as described above. Not disclosed is the frame pivotally secured to the vehicle. Examiner takes official notice that it is old and notoriously well known in the farm machinery art to have a frame use a chain to drive tools. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the thinner of Olmo et al. as modified by Pellenc by having the frame which is pivotal so that the thinner can adjust to vines of varying height.

As to Claim 7, Olmo et al. as modified by Pellenc further disclose the arm having upper and lower arms (region around 33 and leadline of 10 are upper and lower arms, respectively, Fig. 9 of Pellenc).

As to Claims 8 and 10, Olmo et al. as modified by Pellenc further disclose flexible 1st and 2nd fingers (Fig. 9 of Pellenc).

As to Claims 9 and 11, the limitations of Claims 8 and 10 are disclosed as described above. Not disclosed is the finger made of plastic. Examiner takes official notice that it is old and notoriously well known in the farm machinery art to have a appendages made of plastic. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the thinner of Olmo et al. as modified by Pellenc by having the fingers made of plastic so as to reduce the cost of production.

As to Claim 12, Olmo et al. as modified by Pellenc further disclose a guide wheel (56 of Fig. 1 of Olmo et al.) adapted to roll along a central wire on a trellis.

As to Claim 13, Olmo et al. as modified by Pellenc further disclose the tool supported by an articulating arm (10 of Figs. 2 and 9 of Pellenc).

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As to Claim 14, Olmo et al. as modified by Pellenc further disclose a circular disc with a plurality of radially spaced apart fingers (16 of Fig. 2 of Pellenc).

As to Claim 16, the limitations of Claim 11 are disclosed as described above. Not disclosed is an oval chain with the plurality of spaced apart fingers. Examiner takes official notice that it is old and notoriously well known in the farm machinery art to use a chain to drive tools. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the thinner of Olmo et al. as modified by Pellenc by using a oval chain drive so as to have a drive mechanism which can be fixed quickly.

As to Claim 17, the limitations of Claim 13 are disclosed as described above. Not disclosed is the frame pivotally secured to the vehicle. Examiner takes official notice that it is old and notoriously well known in the farm machinery art to have a frame use a chain to drive tools. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the thinner of Olmo et al. as modified by Pellenc by having the frame which is pivotal so that the thinner can adjust to vines of varying height.

As to Claim 18, Olmo et al. as modified by Pellenc further disclose the arm having upper and lower arms (region around 33 and leadline of 10 are upper and lower arms, respectively, Fig. 9 of Pellenc).

As to Claim 19, Olmo et al. as modified by Pellenc further disclose flexible 1st and 2nd fingers (Fig. 9 of Pellenc).

As to Claims 20, the limitations of Claim 19 are disclosed as described above. Not disclosed is the finger made of plastic. Examiner takes official notice that it is old and notoriously well known in the farm machinery art to have a appendages made of plastic. It

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would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the thinner of Olmo et al. as modified by Pellenc by having the fingers made of plastic so as to reduce the cost of production.

As to Claim 21, Olmo et al. as modified by Pellenc further disclose flexible 1st and 2nd fingers (Fig. 9 of Pellenc).

As to Claim 22, the limitations of Claim 21 are disclosed as described above. Not disclosed is the finger made of plastic. Examiner takes official notice that it is old and notoriously well known in the farm machinery art to have a appendages made of plastic. It would have been obvious to one of ordinary skill in the art at the time of the invention to further modify the thinner of Olmo et al. as modified by Pellenc by having the fingers made of plastic so as to reduce the cost of production.

Claims 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Olmo et al. (US 3,606,741) in view of Pellenc (EP 0053570 A1) in further view of Mead et al. (US 4,383,400).

As to Claim 4, the limitations of Claim 2 are disclosed as described above. Not disclosed is the tool a circular brush. Mead et al., however, discloses a tool as a circular brush (26 of Fig. 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the tool of Olmo et al. as modified by Pellenc by having the tool a circular brush as disclosed by Mead et al. so that the thinner could reposition the shoots left on the vine.

As to Claim 15, the limitations of Claim 13 are disclosed as described above. Not disclosed is the tool a circular brush. Mead et al., however, discloses a tool as a circular brush (26 of Fig. 1) adapted to be rotated by the power unit. It would have been obvious to one of

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ordinary skill in the art at the time of the invention to modify the tool of Olmo et al. as modified by Pellenc by having the tool a circular brush as disclosed by Mead et al. so that the thinner could reposition the shoots left on the vine.

Allowable Subject Matter

Claims 23-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Morris et al. ('538 B1), Deux et al., Peterson et al., Oldridge, Opp, Christie et al., Scott, DE 19713452 A1, DE 4103915 A1, and Childers et al. disclose in the prior art various thinning devices.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Jeffrey L. Gellner whose phone number is 703.305.0053. The Examiner can normally be reached Monday through Thursday from 8:30 am to 4:00 pm. The Examiner can also be reached on alternate Fridays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, Peter Poon, can be reached at 703.308.2574. The fax phone numbers for the Technology Center where this application or proceeding is assigned are 703.305.7687, 703.305.3597, and 703.306.4195.

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Jeffrey L. Gellner

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703.308.1113.

PETER M. POON

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